

Complete Listing of the Claims

1. (Original) A method to convert a single-ended signal to a differential signal, comprising:

attenuating a single-ended signal received within an attenuator and producing a differential signal at differential output ports formed within the attenuator, the differential signal being based upon the attenuated single-ended signal and a received DC signal;

detecting a common-mode voltage level of the differential signal and providing the detected common-mode voltage level to an inverting input port of an amplifier;

providing a reference common-mode voltage signal to a non-inverting input port of the amplifier;

comparing the detected common-mode voltage level with a voltage level of the reference signal and providing an adjusting signal at an amplifier output port based upon the comparison; and

adjusting common-mode voltage levels of subsequently produced differential signals based upon the adjusting signal.

2. (Original) The method of claim 1, wherein an adjusted common-mode voltage level is substantially equal to the voltage level of the reference signal.

3. (Original) An apparatus for converting a single-ended signal to a differential signal, comprising:

means for attenuating a single-ended signal received within an attenuator and producing a differential signal at differential output ports formed within the attenuator, the differential signal being based upon the attenuated single-ended signal and a received DC signal;

means for detecting a common-mode voltage level of the differential signal and providing the detected common-mode voltage level to an inverting input port of an amplifier;

means for providing a reference common-mode voltage signal to a non-inverting input port of the amplifier;

means for comparing the detected common-mode voltage level with a voltage level of the reference signal and providing an adjusting signal at an amplifier output port based upon the comparison; and

means for adjusting common-mode voltage levels of subsequently produced differential signals based upon the adjusting signal.

4. (Original) The apparatus of claim 3, wherein an adjusted common-mode voltage level is substantially equal to the voltage level of the reference signal.